

February 21, 1953

Dr. P. R. Edwards
Box 185, C?D.C.
Chamblee, Ga.

Dear Dr. Edwards:

Your note about diphasic wichita reached Madison about the same time we did-- I am glad to hear that you got so decisive a result. I take it then that the diagnosis of wichita will be revised to : d:z_x, and the previous strains regarded as monophasic types.

There are so many things to do here, both from previous backlog and new lines stemming from our visit that I hardly know how to begin. I have only just started to resume the kunzendorf experiments. Before I go any further, however, I'll write up a brief resume, for the record, of the result at Chamblee. So far, the only finding on which I would put any weight is that a combination of ineffective (kunzendorf) with effective (para A; morehead...) 1,5... serums was ineffective in eliciting c-phase swarms.

Enclosed is a "coli-crossing instruction sheet", and a summary of the materials we took back with us, for which we are most grateful. I will send back the list of your publications after it is copied. I did have #61 after all, and will return this with a couple of other duplicate reprints. I don't suppose you have any of these left, but #s 60, 70, 77, and 97 would more or less fill the remaining gaps in my own collection. If there are any papers on the attached list of my own that would be of any use to you, please let me know.

Archer's papers are: 1941, J. Roy. Army Med. Corps, 76:143 and 77:188. The first claims that H-serum broth can be used to isolate alternative phases (!) but that O-variants were occasionally isolated this way. He therefore prefers serum-soft agar. The second paper stated that, in para C, growth in 1,5 serum gives c-phase cultures which evoke very little group agglutinin in rabbits. Also, suspensions in mixed phase usually give incomplete agglutination with either specific or group antiserum alone. However, a S. ~~maritima~~ thompson v. berlin, which agglutinated completely in kunzendorf gave some aggl. with a specific thompson serum. Not enough details are given to evaluate the result; it would not be completely astonishing in view of some of the recent results with kunzendorf. He also quotes a puertorico strain which after selection in binns serum-agar gave colonies which agglutinated completely in newport sp. serum and also by stanley (pres. group phase) serum. From these results he questions whether individual bacteria may not carry H antigens of both phases. It hadn't occurred to me before that these experiments are extraordinarily like the current kunzendorf trials, and these may shed more light on the subject.

Esther and I cannot begin to thank Mrs. Edwards, yourself and your colleagues sufficiently for your cordial hospitality.

Yours sincerely,

Joshua Lederberg